

### DETAILED ACTION

1. This Office action is in response to the applicant's response filed on 6/28/11.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,469,101 to Coleman, et al.

Coleman discloses a method of securing an intersection formed from two or more strands of a device suitable for implantation into a living tissue, the intersection defining at least two sections (overlapping = crossing strands; col. 2, 64-66), wherein the crossing strands are secured via knots (col. 3, ll. 16-18). Coleman discloses the device is made of polyester or any other synthetic material, which is non-radiopaque, and would include the portions that are knotted. Coleman also discloses the device formed from the method recited above.

Coleman discloses that the anchors 12 are used to prevent separation of the crossing strands 11, and that the anchors "may be in the form of knot tied during a weaving process of manufacture" (col. 3, ll. 17-19). Thus, the portion of the material that forms anchor 12 during the knotting process is different from the elongated portion of the actual crossing strands. It should be noted that the claims do not recite the specific language of the material being "separate and distinct", as discussed in the

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Interview Summary mailed on 6/28/11. Though the material for anchor 12 may not be separate, the actual portion that is tied is different from the elongated portion of the crossing strands. It is also noted that the claims do not recite that the material is "formed from a material that is different from the crossing strands".

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 1, 2, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al., as applied to the claims above, and in view of US 1,947,166 to Nydegger.

Coleman discloses all the limitations of the claims, including the securing material being a different portion than the crossing strand. But if this is not found persuasive, Coleman does disclose that the knots are formed during the weaving process. Nydegger discloses another type of method of forming a weave with crossing strands, wherein the intersection is also knotted with a separate and distinct material (textile loop 42; page 2, ll. 23-25). Therefore, it would have been obvious to one of ordinary skill in the weaving art to use the methodology of Nydegger in the invention of Coleman since it has been held that the use of a known technique (e.g., forming knots with separate and distinct tying loops) will improve similar devices (weaves with crossing strands) in the same way and will yield predictable results. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1396 (2007).

9. Claim 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al., (and in view of Nydegger) as applied to the claims above, and in further in view of The Ashley Book of Knots by Clifford W. Ashley (previously recited).

Coleman discloses the method of securing an intersection formed from two or more crossed strands via knotting, but is silent with regards to how the knots are formed. However, Ashley discloses a variety of methods of forming knots. Specifically, Ashley teaches forming a "Lineman's Loop" on page 191 (included with in the Office Action dated 11/04/04). Such a knot is "strong, secure, and easily tied" (p. 191, line 8). Therefore, it would have been obvious to one having ordinary skill in the art of knots to secure the intersecting strands of Coleman with a Lineman's Loop, as taught by Ashley, in order to quickly form strong knots.

### ***Response to Arguments***

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. With regards to the rejections under 35 USC 102 to Coleman, please see the updated rejections above with regards to how the examiner has interpreted the amended limitations.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin Erezco whose telephone number is (571)272-4695. The examiner can normally be reached on Monday-Friday (7:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, Corrine McDermott, at (571) 272-4754.*** The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

***If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to***

***TC3700\_Workgroup\_D\_Inquiries@uspto.gov.***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Darwin P. Erezon/  
Primary Examiner, Art Unit 3773